

DETAILED ACTION

1. In view of the Supplemental Appeal Brief filed on 4/22/2008, and the Appeal Conference held on 9/11/2008 with Greg Huson and Robin Evans, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.

/Gregory L. Huson/

Supervisory Patent Examiner, Art Unit 3751

STATUS OF CLAIMS

2. Claims 1-9 remain, with action on the merits found below, claim 10 is cancelled.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1,2,3,5,8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wade (AU-B-16551/95).

Regarding claims 1,2,3,5,8 and 9, Wade discloses a first flush water diverter comprising a T-piece (6) with associated rainwater collection chamber, which T-piece is adapted for connection in a rainwater flow path to intercept the flow of rainwater from a roof into a downpipe or directly to a storage or usage area, the collection chamber (1) including a float (5) which seals on a seat adjacent a T-piece inlet to the collection chamber when the collection chamber is charged with rainwater and having a diameter which is an integral multiple of the diameter of the T-piece inlet (since one is an integral multiple), the collection chamber is a pvc tube having a diameter of approximately 300 mm (Col. 6, Lns. 1-5), the pvc tube has a length of between about 225 mm and 2005

mm (Col. 6,14-19), and wherein the collection chamber includes an outlet and associated flow control valve (12) to regulate the flow of diverted rainwater from the collection chamber, and wherein a hose connection (11) is fitted to the flow control valve as shown in Figure 1, wherein a filter screen (15,16) is provided at the outlet as seen in Figure 2, wherein the float is a ball which freely floats on the surface of the rainwater which collects in the collection chamber as shown in Figure 5 and in (Col. 4, Lns. 2 and 3), and a collection chamber having a capacity defined by the equation in the form of fall pipe volumes of 5 to 100 litres (Col. 6, Lns. 6-14).

Wade is silent to the claimed limitation regarding the rainwater carrying capacity formula and pollution factor, "the said collection chamber having a rainwater carrying capacity defined by the formula: $DF = RA \times PF \times 1000$ where DF is the rainwater carrying capacity, or diversion factor, measured in litres, RA is the associated roof area measured in square metres, PF is the Pollution Factor for the roof location which is determined on site and varies between 0.0005 for light pollution locations and 0.002 for heavy pollution locations".

Wade discloses on page 6, lines 6 – 19, that tests were conducted "to optimise the dimensions of the apparatus exemplified above for use in a domestic water collection system", with consideration given for the roof area and for a pollution factor, "To simulate bird and animal droppings, plastic beads and styrene shapes of equivalent density were used".

Wade therefor discloses the optimization of a rainwater diverter tank on the basis of foreign matter in the equation and a roof area, therefore it would have been obvious

for a skilled artisan to optimize the size of the collection chamber based on the roof size and environmental surroundings based on some type of relative location for instance in heavy or light pollution areas, in order to determine the size of the collection chamber.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wade (AU-B-16551/95) in view of Sill (US 1,460,613).

Wade teaches all of the claimed invention, but is silent to having the collection chamber is adapted for support on a stand or for connection to a wall or post.

Sill teaches the use of a rain water supply system on a stand, as seen in Figures 1 and 2.

In view of the Sill patent, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the collection chamber of Wade with the stand of Sill in order to provide a collection chamber which would be out of the reach of small children for safety concerns.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wade (AU-B-16551/95) in view of Galliher (849,674).

Regarding claim 6, Wade teaches all of the claimed invention, but is silent to having to having a conical cap connecting the T-piece to the collection chamber.

Galliher discloses a filter for eaves-troughs which teaches the use of an integral conical cap connection (the conical connection between H and A) from a pipe above to the collection chamber (A) as shown in the left most tank.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a conical cap as taught by Galliher onto the top portion of the container of Wade, in order to have a transitional connection joint between the conduit and the chamber.

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wade (AU-B-16551/95) in view of Long (GB 2,220,223 A).

Wade teaches all of the claimed invention, but is silent to having a conical receptacle is fitted to the lower end of the collection chamber which houses the outlet.

Long discloses a rainwater catchment device which teaches the use of a conical receptacle (10) which is fitted to the lower end of the collection chamber, which houses the outlet, as shown.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the collection chamber of Wade with a conical receptacle as taught by Long, in order to provide a chamber which would drain out all of the possible rainwater from the holding tank.

Response to Arguments

8. Applicant's arguments filed 4/22/2008 have been fully considered but they are not persuasive.

Applicants argument concerning the use of the Wade '835 reference in that the collection chamber has a diameter "which is an integral multiple of the diameter of the

T-Piece inlet", is not persuasive, since 1 is considered as an integral multiple and the inlet is the same size as the chamber, therefore the claim limitation has been met.

Applicants argument concerning that the Wade'835 reference gives no consideration to the claimed pollution factor is not persuasive because the Wade reference provides on page 6, lines 6 – 19, that tests were conducted "to optimise the dimensions of the apparatus exemplified above for use in a domestic water collection system", with consideration given for the roof area and for a pollution factor, "To simulate bird and animal droppings, plastic beads and styrene shapes of equivalent density were used". In view of this disclosure, one could optimize the size of the collection chamber based on the roof size and environmental surroundings (ie. bird droppings, leaves from trees) based on some type of relative location for instance in heavy or light pollution areas, in order to determine the size of the collection chamber.

Applicant appears to be arguing the above issues based on a 102 anticipated rejection, when the Examiner has provided a motivation for equivalent structure as compared to applicants invention.

Applicants argument regarding how the range 0.0005-0.002 would have been obvious in light of the passage from Wade, is not persuasive, as Wade has determined an amount of water for a particular size roof taking into account the pollution, ie. the use of beads to simulate bird droppings, to "optimise the dimensions of the apparatus" page 6, lines 6-8. This range is optimised by determining the number of birds or trees present for a particular area, light factor for an area where little birds and vegetations are present and a heavy factor for where many birds and vegetation is present.

Applicants argument concerning that the Sill reference fails to cure the deficiency of Wade regarding the pollution factor is not persuasive, since Sill is used to teach the use of a stand and the arguments concerning Wade are addressed above.

Applicants argument concerning claims 6 and 7 are moot based on the new grounds of rejection.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig Price whose telephone number is (571) 272-2712. The examiner can normally be reached on 7AM - 5:30PM M-R.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CP 27 October 2008 /Gregory L. Huson/

/C. P./ Supervisory Patent Examiner, Art
Examiner, Art Unit 3753 Unit 3751